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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,251	12/21/2000	Andrew Issac Deitsch	RD-27,606	8203

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GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
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NISKAYUNA, NY 12309

EXAMINER

DAVIS, ZACHARY A

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2137

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/741,251	Applicant(s) DEITSCH ET AL.	
	Examiner Zachary A. Davis	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-101 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-101 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A response was received on 06 December 2005. No claims have been amended, added, or canceled. Claims 1-101 are currently pending in the present application.

Response to Arguments

2. Applicant's arguments filed 06 December 2005 have been fully considered but they are not persuasive.

Claims 1-101 were rejected under 35 U.S.C. 103(a) as unpatentable over Lloyd et al, US Patent 6219790, in view of Vorobiev, US Patent 6651063.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Specifically, Applicant argues that Lloyd does not disclose a gateway device for securely managing activities between a device and a service provider where the activities include obtaining status or diagnostic information or usage history from the device and providing information regarding failure and status updates to the provider. However, the Examiner believes that Lloyd does disclose a gateway securely managing

activities between a device and a service provider. Specifically, Applicant is directed to Figure 2, AAA Server 118, where the server manages activities (column 13, lines 2-21) between a user device (column 5, lines 38-40; Figure 1, workstation 128) and a service provider (column 4, lines 15-21; Figure 1, elements 110, 114, 116, for example).

Further, regarding the nature of the managed activities, the Examiner notes that Lloyd was not relied upon to teach the types of activities. Rather, Vorobiev was included for a teaching of specific activities to be managed.

Additionally, Applicant argues that Vorobiev does not disclose a gateway device for securely managing activities between a device and a service provider. The Examiner respectfully disagrees, and believes that Vorobiev does disclose such a gateway (see Figure 6, the Portal including User Data Repository 628; see also column 19, line 22-column 20, line 6, where the user data repository communicates with both the smart appliance and the provider, in this case the appliance vendor).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation was as stated in the previous Office action, namely to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and to allow an entire

household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62). The Examiner notes that Applicant argues that "there is no motivation in Lloyd to combine it with Vorobiev" (page 20 of the present response); however, this is a spurious argument, as the Examiner has relied upon motivation in Vorobiev for combining its teachings with Lloyd.

Therefore, for the reasons detailed above, the Examiner maintains the rejection as set forth below. In the above response and the rejection below, although the Examiner has cited particular columns, line numbers and figures in the references as applied to the claims for the convenience of Applicant, the specified citations are merely representative of the teaching of the prior art that are applied to specific limitations within the individual claims and other passages and figures may apply as well. It is respectfully requested that Applicant, in preparing any further response, fully consider the items of evidence in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd et al, US Patent 6219790, in view of Vorobiev, US Patent 6651063.

In reference to Claim 1, Lloyd discloses a gateway device (Figure 2, AAA Server 118) including an authenticator authenticating the identity of a device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and a service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and an activity manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device (Figure 6, User Data Repository 628; column 19, line 22-column 20, line 6) that includes an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 10, Lloyd discloses a gateway device (Figure 2, AAA Server 118) including an authenticator authenticating the identity of a plurality of devices

permitting interaction between the devices and service providers (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and an activity manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device (Figure 6, User Data Repository 628; column 19, line 22-column 20, line 6) that includes an authenticator authenticating devices (column 9, lines 4-7) and providers (column 6, lines 37-46), an access authorizer permitting the providers to interact with the devices (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 19, Lloyd discloses a gateway device (Figure 2, AAA Server 118) including a request handler (column 5, lines 59-64), an authenticator authenticating the identity of a device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and a service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), an activity manager (column 4, lines 48-50; column 13, lines 2-21), and a

response component (column 10, lines 25-29; column 5, lines 29-37). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device (Figure 6, User Data Repository 628; column 19, line 22-column 20, line 6) that includes a request handler receiving activity requests (column 19, lines 47-62), an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6), and a response component (column 4, lines 28-43; column 10, lines 43-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 26, Lloyd discloses a gateway device (Figure 2, AAA Server 118) including a request handler (column 5, lines 59-64), an authenticator authenticating the identity of a device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and a service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), an activity manager (column 4, lines 48-50; column 13, lines 2-21), a data format translator (column 3, lines 8-9; column 6, lines 56-60), and a response

component (column 10, lines 25-29; column 5, lines 29-37). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a gateway device (Figure 6, User Data Repository 628; column 19, line 22-column 20, line 6) that includes a request handler receiving activity requests (column 19, lines 47-62), an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6), and a response component (column 4, lines 28-43; column 10, lines 43-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 27, Lloyd discloses a gateway device (Figure 2, AAA Server 118) including means for authenticating the identities of the service provider and device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), means for permitting the service provider to interact with the device (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and means for managing activities between the service provider and device (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed.

Vorobiev discloses a gateway device (Figure 6, User Data Repository 628; column 19, line 22-column 20, line 6) that includes an authenticator authenticating a device (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the device (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 36, Lloyd discloses a system including at least one appliance in a first network (Figure 1, workstation 128; column 5, lines 38-40); a service provider in a second network (Figure 1, elements 110, 114, 116, for example; column 4, lines 15-21); and a gateway device (Figure 2, AAA Server 118) including an authenticator authenticating the identity of the appliance (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and the service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and a service manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed. Vorobiev discloses a system including an appliance in a first

network (Figure 6, smart appliance 609); a provider in a second network (Figure 6, provider/appliance vendor 614); and a gateway device (Figure 6, User Data Repository 628; column 19, line 22-column 20, line 6) that includes an authenticator authenticating an appliance (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the appliance (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

In reference to Claim 45, Lloyd discloses a system including at least one device in a first network (Figure 1, workstation 128; column 5, lines 38-40); a service provider in a second network (Figure 1, elements 110, 114, 116, for example; column 4, lines 15-21); and a gateway device (Figure 2, AAA Server 118) including an authenticator authenticating the identity of the device (column 3, lines 23-30; column 4, lines 15-21; column 5, lines 5-16), an access authorizer permitting interaction between the device and the service provider (column 3, lines 31-34; column 12, lines 8-15, noting column 11, lines 16-23), and an activity manager (column 4, lines 48-50; column 13, lines 2-21). However, Lloyd does not explicitly disclose the specific activities being managed.

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Vorobiev discloses a system for securely providing remote monitoring and diagnostics (column 19, lines 58-62) including an device in a first network (Figure 6, smart appliance 609); a provider in a second network (Figure 6, provider/appliance vendor 614); and a gateway device (Figure 6, User Data Repository 628; column 19, line 22-column 20, line 6) that includes an authenticator authenticating an appliance (column 9, lines 4-7) and a provider (column 6, lines 37-46), an access authorizer permitting the provider to interact with the appliance (column 7, lines 27-40; column 8, lines 55-65), and an activity manager that manages status and diagnostic information, usage history, notifications of failure, and status updates (column 19, line 63-column 20, line 6; see Figure 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway of Lloyd to include the features taught by Vorobiev, in order to simplify operations and processes (see Vorobiev, column 2, lines 3-35, especially lines 18-21) and in order to allow an entire household of smart appliances to be remotely diagnosed and maintained by a vendor (see Vorobiev, column 19, lines 58-62).

Claim 54 is directed to a method corresponding substantially to the device of Claim 1, and is rejected by a similar rationale.

Claim 62 is directed to a method corresponding substantially to the device of Claim 10, and is rejected by a similar rationale.

Claim 70 is directed to a method corresponding substantially to the device of Claim 19, and is rejected by a similar rationale.

Claim 76 is directed to a method corresponding substantially to the system of Claim 36, and is rejected by a similar rationale.

Claim 84 is directed to a method corresponding substantially to the system of Claim 45, and is rejected by a similar rationale.

Claim 92 is directed to a software implementation of the device of Claim 1 performing the method of Claim 54, and is rejected by a similar rationale. Further, Lloyd discloses that the device and method may be implemented in hardware, software, or a combination of the two (column 13, lines 22-25).

Claim 100 is directed to a software implementation of the device of Claim 10 performing the method of Claim 62, and is rejected by a similar rationale. Further, Lloyd discloses that the device and method may be implemented in hardware, software, or a combination of the two (column 13, lines 22-25).

Claim 101 is directed to a software implementation of the device of Claim 19 performing the method of Claim 70, and is rejected by a similar rationale. Further, Lloyd discloses that the device and method may be implemented in hardware, software, or a combination of the two (column 13, lines 22-25).

In reference to Claims 2, 11, 20, 28, 37, and 46, Lloyd and Vorobiev further disclose a digital signature identifying the gateway device (see Lloyd, column 6, lines 26-30).

In reference to Claims 3, 12, 21, 29, 38, 47, 55, 63, 71, 77, 85, and 93, Lloyd and Vorobiev further disclose a digital signal verifier (see Lloyd, column 6, lines 6-10).

In reference to Claims 4, 13, 22, 30, 39, 48, 56, 64, 72, 78, 86, and 94, Lloyd and Vorobiev further disclose a cryptographic component (see Lloyd, column 5, lines 52-64; see also Vorobiev, column 9, lines 4-7).

In reference to Claims 5, 14, 23, 31, 40, 49, 57, 65, 73, 79, 87, and 95, Lloyd and Vorobiev further disclose specifying permitted activities (see Lloyd, column 6, lines 17-21; see also Vorobiev, column 7, line 62-column 8, line 4).

In reference to Claims 6, 15, 32, 41, 50, 58, 66, 80, 88, and 96, Lloyd and Vorobiev further disclose a request handler receiving activity requests (see Lloyd, column 5, lines 59-64; see also Vorobiev, column 19, lines 47-62).

In reference to Claims 7, 16, 33, 42, 51, 59, 67, 81, 89, and 97, Lloyd and Vorobiev further disclose a response component (see Lloyd, column 10, lines 25-29; column 5, lines 29-37; see also Vorobiev, column 4, lines 28-43; column 10, lines 43-46).

In reference to Claims 8, 17, 24, 34, 43, 52, 60, 68, 74, 82, 90, and 98, Lloyd and Vorobiev further disclose a data format translator (see Lloyd, column 3, lines 8-9; column 6, lines 56-60).

In reference to Claims 9, 18, 25, 35, 44, 53, 61, 69, 75, 83, 91, and 99, Lloyd and Vorobiev further disclose a network protocol translator (see Lloyd, column 2, lines 58-67).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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